

ABSTRACT OF THE DISCLOSURE

A solid state thermal device for conducting heat from a source and transferring the heat to an exhaust tunnel or converter for controlling the current flow passing through the solid state device. The device includes a plurality of diode arrays which interface between heat conductors and an exhaust tunnel. The device includes a thermal cable connected at one end to the heat source and connected at its other end to an interface of solid state devices, such as a diode array. Conductance of the heat to the interface diode array is via a graphite heat conducting composite material conducting heat at least five times the rate of copper. A thermal conversion unit is coupled to the diode interfacing arrays that controllably transfers the heat for introduction into a plurality of graphite composition stages or members, which are included in the unit. A blower is provided in the tunnel for forcibly conducting the heat radiated from the graphite composition members. The diode array interface removes a small amount of heat and then conducts it to the next array, thereby pulling the heat away from the heat source. The graphite material is directional in thermal conduction, and the blower utilizes convection to blow heat through the tunnel.